UNITED STATES PATENT AND TRADEMARK OFFICE

Eeh

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,728	07/31/2001	I. Claude Denton	109897-129948	4316

25943 7590 07/26/2005

SCHWABE, WILLIAMSON & WYATT, P.C.
PACWEST CENTER, SUITE 1900
1211 SW FIFTH AVENUE
PORTLAND, OR 97204

EXAMINER	
NG, CHRISTINE Y	
ART UNIT	**PAPER NUMBER**
2663	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/919,728	DENTON ET AL.	
	Examiner	Art Unit	
	Christine Ng	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-24 and 27-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *17-24* is/are allowed.

6)☒ Claim(s) *27-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The indicated allowability of claim 33 [presently combined with claims 25 and 26] is withdrawn in view of the newly discovered reference(s) to U.S. Patent No. 6,515,967 to Wei et al in view of U.S. Patent No. 6,061,725 to Schwaller et al. Rejections based on the newly cited reference(s) follow.

3. Claims 33, 27-32 and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,515,967 to Wei et al in view of U.S. Patent No. 6,061,725 to Schwaller et al.

Referring to claim 33, Wei discloses a method of testing network communications equipment, comprising:

a) Programming a first set of registers (MRM testers) that define a format of a first test packet (Figure 10). Refer to Column 5, lines 57-64 and Column 11, lines 29-56.

b) Programming a second set of registers (MRM testers) that define a format of second test packet (Figure 10). Refer to Column 5, lines 57-64 and Column 11, lines 29-56.

c) Transmitting a synchronization packet (Figure 7, beacon message). The

beacon message is sent by the MRM manager, which is identified by the "synchronization source identifier" (Column 9, lines 7-10).

d) Transmitting the first test packet (Figure 10). Refer to Column 10, lines 25-27.

e) Transmitting, after a first inter-packet gap (Figure 8, interpacket delay 825), the second test packet (Figure 10). Refer to Column 10, lines 25-27.

Wherein the first test packet (Figure 10) comprises a first packet header (Figure 6), and a first payload (Figure 10); and the second test packet (Figure 10) comprises a second packet header (Figure 6), and a second payload (Figure 10). Refer to Column 7, line 31 to Column 8, line 46 and Column 11, lines 29-56.

Wherein the first and second packet headers (Figure 6) are different. The fields 601-623 of the header in Figure 6 can contain different contents. Refer to Column 7, line 31 to Column 8, line 46.

Wherein further comprising receiving synchronization packet (Column 9, lines 9-14 and lines 26-30), receiving the first test packet; receiving the second test packet; determining if the first test packet was received correctly, and determining if the second test packet was received correctly. Test senders send test packets to test receivers, and test receivers determine whether or not the test packets were received. Test receivers then send a fault report to the MRM manager based on the number of test packets received. Refer to Column 6, lines 21-23; Column 10, line 63 to Column 11, line 6; and Column 11, lines 29-56.

Wei et al do not disclose incrementing a first counter to record the number of received packets.

Schwaller et al disclose a method for monitoring network performance in which there are counters to count the number of packets received, packets transmitted and packets with errors. Refer to Column 1, lines 53-61. Furthermore, Wei et al disclose that one test performed by the MRM manager is to detect packet loss exceeding 20% over a 10 minute period. This would require that the system count the number of packets transmitted and the number of packets received, so that it can determine a percentage of packets that were not received. Refer to Column 6, lines 21-23. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include incrementing a first counter to record the number of received packets; the motivation being so that the number can be used to determine the number of packets lost or in error, thereby providing a indication of the throughput or efficiency of the system.

Referring to claim 27, Wei et al disclose that the method further comprises, after a second inter-packet gap, transmitting the first test packet. As shown in Figure 2, router 117 is assigned as a test source and routers 113,115 are assigned as test receivers. Therefore, the same consecutive test packets are sent first to one test receiver 113 and then to another test receiver 115. The consecutive test packets are sent according to an interpacket delay as indicated by the MRM manager. Refer to Column 6, lines 53-56 and Column 10, lines 25-37

Referring to claim 28, Wei et al disclose that the method further comprises after a occurrence of the first inter-packet gap, transmitting the second packet. Refer to the rejection of claim 27.

Referring to claims 29 and 30, Wei et al disclose in Figure 10 that the first payload and the second payload can be different or the same. The fields 1003-1017 of the test packet can contain different contents. Refer to Column 11, lines 29-56.

Referring to claims 31 and 32, Wei et al disclose programming the first/second set of registers (MRM testers) comprises writing data into one or more registers so as to define:

1) a total number of bytes (Figure 6, data length 619) in the first/second test packet. Refer to Column 8, lines 1-3.

2) a size of a gap (Figure 8, interpacket delay 825) between the transmission of the first and second test packets. Refer to Column 10, lines 25-27.

3) a pattern (Figure 10) used to fill the first/second payload. Refer to Column 11, lines 29-56.

4) a content of the first/second header (Figure 6). Refer to Column 7, line 31 to Column 8, line 46.

Referring to claim 34, Wei et al do not disclose that the method further comprises incrementing a second counter if any received test packet contains an error. Refer to the rejection of claim 33.

Referring to claim 35, Wei et al do not disclose that the method further comprises incrementing a third counter each for each test packet that is transmitted by the test generator. Refer to the rejection of claim 33.

Referring to claim 36, Wei et al do not specifically disclose that transmitting the synchronization packet (Figure 7, beacon message) and receiving the synchronization

packet are performed on a single chip [claim 36]; nor that transmitting the synchronization packet is performed on a first integrated circuit chip and receiving the synchronization packet is performed on a second chip [claim 37].

However, Wei et al disclose in Figure 11 a computer system 1100 with a CPU 1102 for performing functions of the disclosed invention, including controlling the reception and manipulation of input data, and the output and display of data on output devices. This includes manipulating the input data, such as the beacon message with the synchronization source identifier. Furthermore, the CPU 1102 can be implemented by a single-chip processor [claim 36] or by multiple processors [claim 37]. Refer to Column 9, lines 9-10 and Column 12, lines 21-36. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that transmitting the synchronization packet and receiving the synchronization packet are performed on a single chip [claim 36]; or that transmitting the synchronization packet is performed on a first integrated circuit chip and receiving the synchronization packet is performed on a second chip [claim 37]. One would be motivated to do so depending on whether the CPU in the system is implemented with a single chip or multiple chips. A single chip simplifies the system and requires less hardware; whereas two chips provides a clear separation of functions.

Allowable Subject Matter

4. Claims 17-24 are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng CN
July 15, 2005

RICKY NGO
PRIMARY EXAMINER

7/22/05